

# Work Order ID 69501

Wednesday, May 11, 2011 1:43:45 PM



Page 1

Item ID: D4001-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Fitting

Start Date: 5/11/2011 Start Qty: 6.00



Cust Item ID:

Required Date: 5/18/2011 Req'd Qty: 6.00



Customer:

Reference:

Run Start



Approvals: Process Plan: CL Date: 11/05/11 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| D4001    | A            |

100 0.00



Lathe Conv

Memo

0.00

Conventional Lathe

1-Turn as per dwg

DEBURR

120 0.00



QC

Memo

0.00

Quality Control

130 0.00



QC

Memo

0.00

Quality Control

11/05/24 6

11/05/24 6

11.5.24 6

| W/O: |      | WORK ORDER CHANGES |  |    |      |     |                                     |                          |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   |  | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |  |    |      |     |                                     |                          |
|      |      |                    |  |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                      |                                 |                |  |                           |                       |                          |
|------|------|----------------------------------|----------------------|---------------------------------|----------------|--|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action    |                                 | Section B      |  | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng | Action Description<br>Chief Eng | Sign &<br>Date |  |                           |                       |                          |
|      |      |                                  |                      |                                 |                |  |                           |                       |                          |
|      |      |                                  |                      |                                 |                |  |                           |                       |                          |
|      |      |                                  |                      |                                 |                |  |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 69501**

Wednesday, May 11, 2011 1:43:45 PM

Page 2

Item ID: D4001-3

Accept

Setup Start

Revision ID:

Stop

Item Name: Fitting

Start Date: 5/11/2011 Start Qty: 6.00

Cust Item ID:

Required Date: 5/18/2011 Req'd Qty: 6.00

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

131

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

brush alodine as per dwg  
\*\*\*\*\*do not acid etch\*\*\*\*\*

6x 5 m 11/05/24

132

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

6 4 m 11/05/24

140

Identify as per dwg &amp; Stock Location: 105

0.00



Packaging

Memo

0.00

Packaging

11/5/24 DS

| W/O: |      | WORK ORDER CHANGES |  |    |      |     |                                     |                          |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   |  | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |  |    |      |     |                                     |                          |
|      |      |                    |  |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                      |                                 |           |                |                           |                       |                          |
|------|------|----------------------------------|----------------------|---------------------------------|-----------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action    |                                 | Section B |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng | Action Description<br>Chief Eng |           | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                      |                                 |           |                |                           |                       |                          |
|      |      |                                  |                      |                                 |           |                |                           |                       |                          |
|      |      |                                  |                      |                                 |           |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 69501**

Wednesday, May 11, 2011 1:43:45 PM



Page 3

Item ID: D4001-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Fitting

Start Date: 5/11/2011 Start Qty: 6.00



Cust Item ID:

Required Date: 5/18/2011 Req'd Qty: 6.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

150

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/5/2648  
MF  
11-05-75

| W/O: |      | WORK ORDER CHANGES |  |    |      |     |                                     |                          |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   |  | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |  |    |      |     |                                     |                          |
|      |      |                    |  |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                      |                                 |                |  |                           |                       |                          |
|------|------|----------------------------------|----------------------|---------------------------------|----------------|--|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action    |                                 | Section B      |  | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng | Action Description<br>Chief Eng | Sign &<br>Date |  |                           |                       |                          |
|      |      |                                  |                      |                                 |                |  |                           |                       |                          |
|      |      |                                  |                      |                                 |                |  |                           |                       |                          |
|      |      |                                  |                      |                                 |                |  |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Page 1

Wednesday, May 11, 2011 1:43:43 PM

Work Order ID: 69501



Parent Item: D4001-3



Parent Item Name: Fitting


Start Date: 5/11/2011

Required Date: 5/18/2011

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP rev A 09.12.23 new issue Prelim EC verified by:DD IPP rev B  
10.05.13 ecn10-562 EC verified by:DD

| Component Item ID/<br>Item Name   | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| AN832-6D<br> |                        | Purchased     |             | No                  |                  |                 | Each               | 7.0000         |             | 6            |               |                |        |

UNION

Location

Loc Qty

Loc Code

ST335

7

116289

7

6 ~~7~~ 11/05/24

| W/O: |      | WORK ORDER CHANGES |  |    |      |     |                                     |                          |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   |  | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |  |    |      |     |                                     |                          |
|      |      |                    |  |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

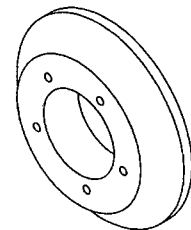
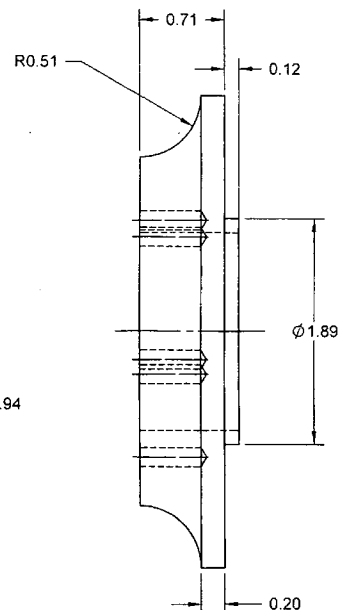
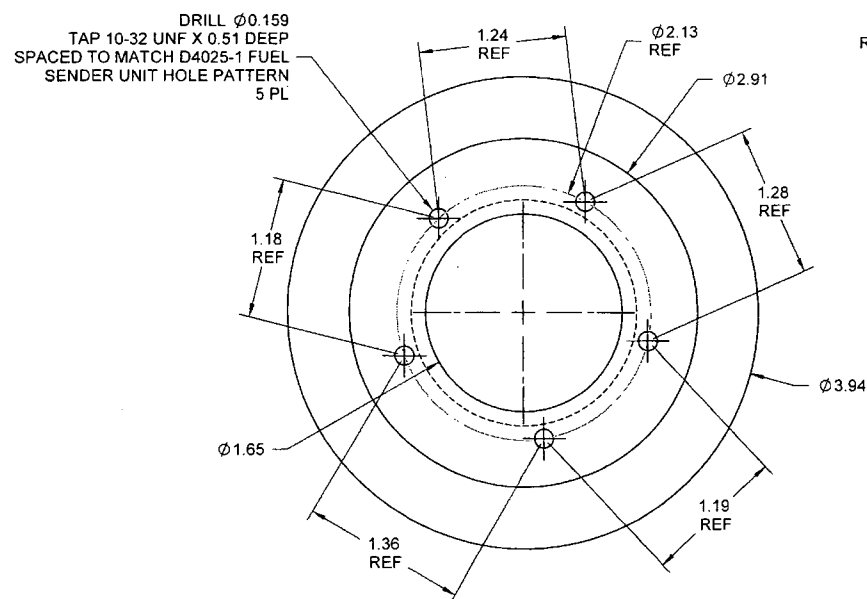
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                      |                                 |           |                |                           |                       |                          |
|------|------|----------------------------------|----------------------|---------------------------------|-----------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action    |                                 | Section B |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng | Action Description<br>Chief Eng |           | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                      |                                 |           |                |                           |                       |                          |
|      |      |                                  |                      |                                 |           |                |                           |                       |                          |
|      |      |                                  |                      |                                 |           |                |                           |                       |                          |

**NOTE:** Date & initial all entries



| DART AEROSPACE<br>PART NUMBER | JOHN CAMERON AVIATION<br>PART NUMBER |
|-------------------------------|--------------------------------------|
| D4001-1                       | JCA-M47-1-08                         |



# **D4001-1 FITTING**

*Q21103111*  
*WID: 69501*

## **NOTES:**

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ALUMINUM BAR  
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
PER AMS-QQ-A-200/8 (OR AMS 4160)  
REF DART SPEC M6061T6R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.47 lbs

**RELEASED**  
2010-05-05

| REV.       | NEW ISSUE | DESCRIPTION | BY | DATE |
|------------|-----------|-------------|----|------|
| DESIGN     |           |             |    |      |
| DRAWN      |           |             |    |      |
| CHECKED    |           |             |    |      |
| MFG. APPR. |           |             |    |      |
| APPROVED   |           |             |    |      |
| DE APPR.   |           |             |    |      |
| DATE       | 10.02.05  |             |    |      |

|  |              |
|--|--------------|
| <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA | REV. A       |
| DRAWING NO.<br><b>D4001</b>                              | SHEET 1 OF 2 |
| TITLE<br><b>FITTING</b>                                  | SCALE<br>NTS |

COPYRIGHT © 2010 BY DART AEROSPACE LTD  
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS  
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT  
WRITTEN PERMISSION FROM DART AEROSPACE LTD.

| W/O: |      | WORK ORDER CHANGES |  |    |      |     |                                     |                          |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   |  | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |  |    |      |     |                                     |                          |
|      |      |                    |  |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

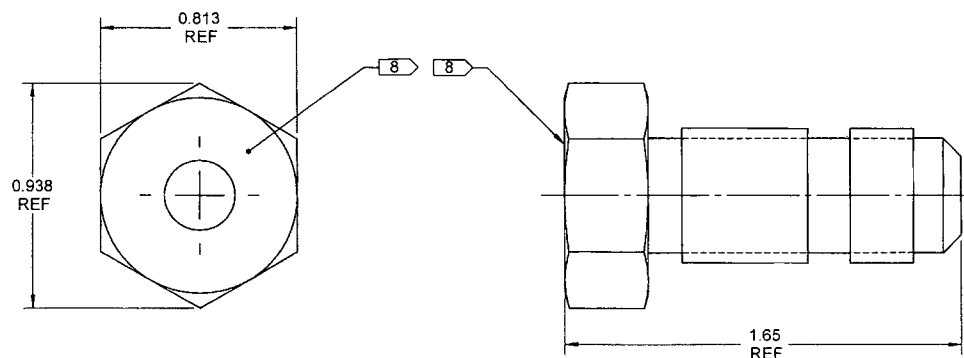
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                      |                                 |           |                |                           |                       |                          |
|------|------|----------------------------------|----------------------|---------------------------------|-----------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action    |                                 | Section B |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng | Action Description<br>Chief Eng |           | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                      |                                 |           |                |                           |                       |                          |
|      |      |                                  |                      |                                 |           |                |                           |                       |                          |
|      |      |                                  |                      |                                 |           |                |                           |                       |                          |

**NOTE:** Date & initial all entries

| DART AEROSPACE<br>PART NUMBER | JOHN CAMERON AVIATION<br>PART NUMBER |
|-------------------------------|--------------------------------------|
| D4001-3                       | JCA-M47-2-28<br>(AN832-6D-JCA)       |

AN832-6D  
BEFORE MODIFICATION  
REF



**D4001-3 FITTING**

**NOTES:**

- 1) MATERIAL: MADE FROM AN832-6D
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4001-3" AND B/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.04 lbs
- 8) BRUSH ALODINE MACHINED SURFACE

|            |          |  |              |
|------------|----------|--|--------------|
| DESIGN     |          | <b>DART AEROSPACE LTD</b>  |              |
| DRAWN      |          | HAWKESBURY, ONTARIO, CANADA  |              |
| CHECKED    |          | DRAWING NO. <b>D4001</b>   | REV. A       |
| MFG. APPR. |          |  | SHEET 2 OF 2 |
| APPROVED   |          | TITLE <b>FITTING</b>   | SCALE        |
| DE APPR.   |          |  | NTS          |
| DATE       | 10.02.05 | <small>COPYRIGHT © 2010 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS<br/>NOT TO BE USED FOR ANY PURPOSE OR COMMERCIALIZED TO ANY OTHER PERSON WITHOUT<br/>WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |              |

**RELEASED**  
2010-05-05  
MP

| W/O: |      | WORK ORDER CHANGES |  |    |      |     |                                     |                          |  |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   |  | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |  |    |      |     |                                     |                          |  |
|      |      |                    |  |    |      |     |                                     |                          |  |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                      |                                 |           |                |                           |                       |                          |
|------|------|----------------------------------|----------------------|---------------------------------|-----------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action    |                                 | Section B |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng | Action Description<br>Chief Eng |           | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                      |                                 |           |                |                           |                       |                          |
|      |      |                                  |                      |                                 |           |                |                           |                       |                          |
|      |      |                                  |                      |                                 |           |                |                           |                       |                          |

**NOTE:** Date & initial all entries



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |  |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |  |
|      |      |                    |    |      |     |                                     |                          |  |
|      |      |                    |    |      |     |                                     |                          |  |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries